Shoreline Policy: Regulatory Overview

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Regulatory Process for Living Shoreline Implementation in Maryland

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ABSTRACT

Several pieces of federal and Maryland State legislation have granted federal, state, and local government authority over construction or alteration of the riparian and tidal areas of the shoreline. At the federal and state level, tidal wetland permits, licenses, and certifications in Maryland have been streamlined into a joint federal/state application. However, local grading and building permits may also be required. Therefore, property owners seeking to implement shoreline projects must often apply for multiple permits. The purposes of this paper are to: 1) describe the federal/state permitting processes for living shorelines in Maryland, 2) provide an example of a local jurisdiction permit process (Kent County, MD), and 3) discuss some issues and potential future regulatory enhancement areas identified during the Living Shoreline Summit regulatory panel.

INTRODUCTION: GENERAL PERMIT APPLICATION PROCESSES

Shoreline protections and wetland restoration projects (including placement of rock, fill, and plants) can impact the areas extending from the riparian buffer to sub-aqueous bottoms called Public Trust Lands. These lands are held in trust and protected by the government for the benefit of the public as a whole. Due to impacts in both the riparian buffer and subaqueous bottomlands, shoreline projects may require multiple permits at the federal, state, and local levels.

Several pieces of legislation serve as the basis for shoreline project regulation at the various governmental levels. The Environment Article Title 16, Wetlands and Riparian Rights Act, promulgated in 1970, and the related regulations COMAR 26, 24 Tidal Wetlands revised in 1994, give authority to the State of Maryland to regulate shoreline work. The Maryland's Chesapeake Bay Critical Area Program, Natural Resources Subtitle 8-1803 gives authority to local jurisdictions to accomplish and prioritize shoreline protection. Federal authority is given under both the Rivers and Harbors Act of 1899 and the Clean Water Act of 1972 with permitting oversight provided to the US Army Corps of Engineers (the Corps). In 1989, the state and federal permit applications were combined by the Maryland Department of Environment (MDE) and the Corps to help streamline the review process. The joint permit, called the Maryland State Programmatic General Permit (or MDSPGP; hereafter referred to as "joint permit"), is overseen by the MDE Water Management Administration. Under the joint permit, state and federal resource agencies review and comment on applications and activities that could impact sensitive resources. The Corps retains discretionary authority to require an individual permit for any proposed activity that has significant individual or cumulative impacts, impacts threatened or endangered species, impacts cultural or historical resources, impacts identified during the public interest review, or been identified for further review by a federal resource agency.

A joint permit is required for projects that are less than 500 linear feet and extend up to 35 feet into navigable waters. For projects that exceed either 500 linear feet or extend offshore more than 35 feet, a Maryland State Tidal Wetlands License is required from the Maryland Board of Public Works. Proposed projects that exceed one acre of impacts cannot be authorized under the joint permit and require an Individual Permit (IP) from the Corps.

In addition to the joint federal/state permit, applicants are required to obtain a local grading or building permit. Local jurisdiction permits and processes vary and can be more stringent than state and federal policy. As a result, it is important for applicants to contact county or city planning and zoning office about local permit requirements (Table 1). It is advantageous to contact local offices early in the process before the joint federal/state permit application process is initiated. All permits should be sought at the same time. However it should be noted that some counties will not issue their approvals until federal and state authorizations have been granted for the project.

FEDERAL/STATE TIDAL WETLANDS LICENSE PROCESS

Step One: Application Submission

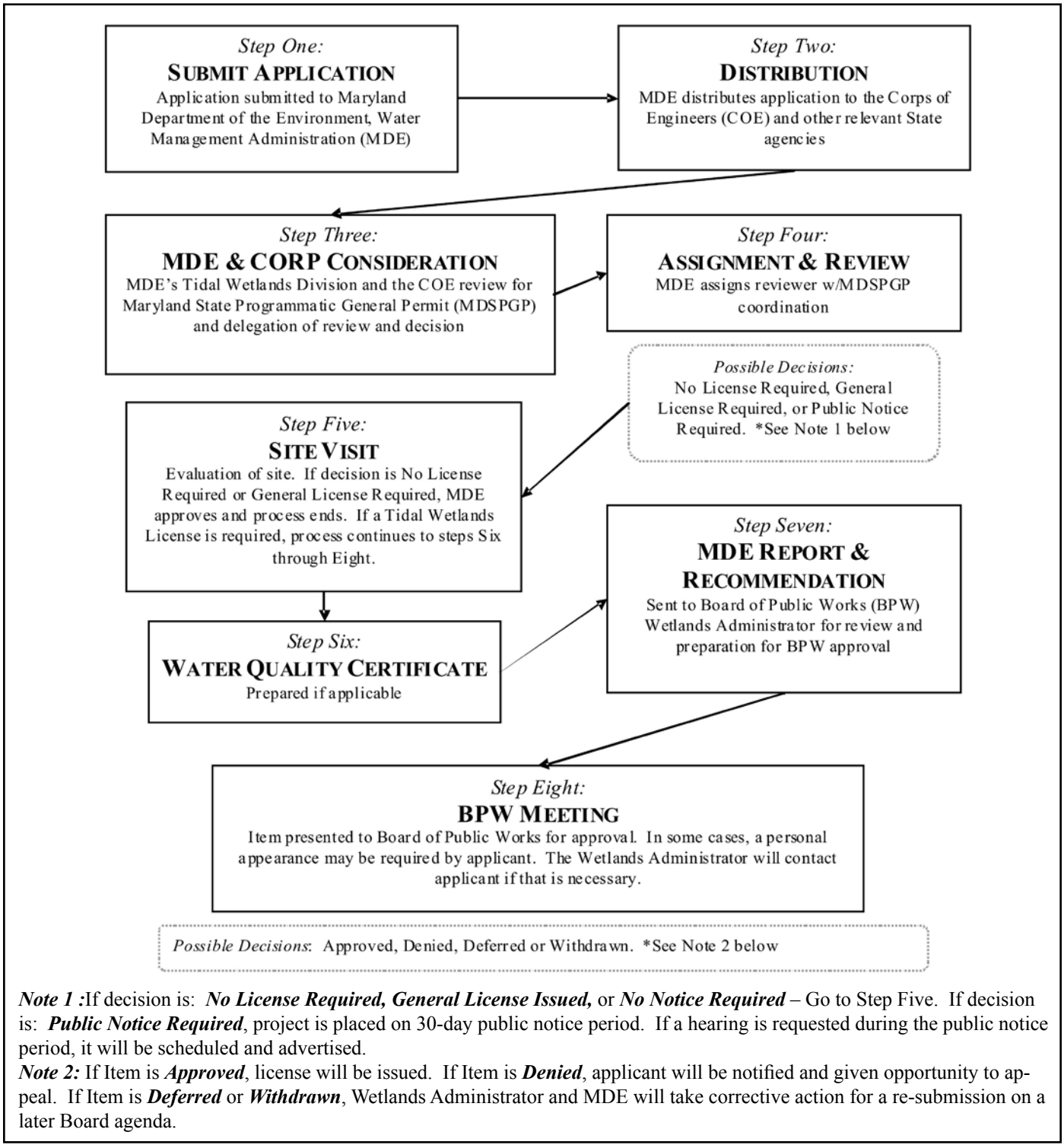
Applicants must apply for the joint permit (MDSPGP) by submitting four copies of the Joint federal/State Application to the MDE Water Management Administration. Once received by the Regulatory Services Coordination Office of this Administration, the application proceeds through a series of steps (Fig. 1).

County	Office	Contact Information
Anne Arundel	Department of Inspections and Permits	(410) 222-7790 www.aacounty.org/ip
Baltimore City	Department of Permits and Code Enforcement	(410) 396-3540, (410) 396-5915 www.baltimorehousing.org/index/permits.asp
Baltimore	Department of Permits and Developmental Management	(410) 887-3353 www.baltimorecountymd.gov/agencies/permits/index.html
Calvert	Department of Planning and Zoning, Inspections and Permits Division	(410) 535-1600, (410) 535-2348 www.co.cal.md.us/government/departments/planning
Caroline	Department of Planning and Codes Administration	(410) 479-8115 www.carolinemd.org/governmt/planning/plantop.html
Cecil	Department of Permits and Inspections	(410) 996-5235, (410) 996-5220 www.ccgov.org/dept_permits/permitprocessing.cfm
Charles	Permits Administration	(301) 645-0627 www.charlescounty.org/pgm/permits
Dorchester	Inspections & Permits	(410) 228-3234, (410) 228-9636 www.docogonet.com/index.php?page=planning_zoning
Harford	Department of Inspections, Licenses, & Permits	(410) 638-3344 www.harfordcountymd.gov/dilp/
Kent	Inspections & Permits	(410) 778-7423 http://kentcounty.com/gov/planzone/pandz.htm
Queen Anne's	Zoning & Permits	(410) 758-1255, (410) 758-4088 www.qac.org/depts/planzone/planzonehome.htm
St. Mary's	Inspections & Enforcement	(301) 475-4200 www.co.saint-marys.md.us/permits-inspections
Somerset	Division of Planning & Zoning	(410) 651-1424
Talbot	Office of Planning & Zoning	(410) 770-8030 www.talbotcountymd.gov/index.php?page=Planning_and_Zoning
Wicomico	Department of Planning, Zoning, & Community Development	(410) 548-4860 www.wicomicocounty.org/pnz/p&z.htm
Worcester	Department of Development Review & Permitting	(410) 632-1200, ext. 1100 www.co.worcester.md.us/PPI.htm

Table 1. *Contacts for local shoreline project permits in Maryland*

Step Two: Application Distribution

After an initial review, it is forwarded to the appropriate state or federal divisions/agencies. A notice is sent to the applicant notifying him or her of this action and providing tracking information for the application. Additional agencies involved in the review include the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, the Maryland Department of Natural Resources (DNR), the Maryland Historic Trust, and any interested individuals. Initially, shoreline



Note 1 :If decision is: ***No License Required, General License Issued,*** or ***No Notice Required*** – Go to Step Five. If decision is: ***Public Notice Required***, project is placed on 30-day public notice period. If a hearing is requested during the public notice period, it will be scheduled and advertised.
Note 2: If Item is ***Approved***, license will be issued. If Item is ***Denied***, applicant will be notified and given opportunity to appeal. If Item is ***Deferred*** or ***Withdrawn***, Wetlands Administrator and MDE will take corrective action for a re-submission on a later Board agenda.

Figure 1. *State of Maryland Tidal Wetlands Licensing Flow Chart*

projects are distributed to the MDE Tidal Wetlands Division and the Corps. These agencies can contact the applicant individually or jointly if they need to advise the applicant of additional requirements.

Steps Three and Four: Application Review

The MDE Tidal Wetlands Division determines the applicability of review for a proposed project under the joint permit by posing the following questions: 1) Does the proposed work qualify under the joint permit? and 2) If it does qualify, under which category (CAT) should it proceed? (CAT 1 General License Requirements are met, or CAT 3 Public Notice is required because the project exceeds the limits of the State's General Licenses). If the project does not qualify (1 acre of fill or greater), the Corps must conduct an Individual Authorization Review. For CAT 3, the Board of Public Works must issue a Tidal Wetlands License.

The application is also given a public interest review and is considered through four categories (no public notice, public notice, joint public notice, or agency notice only). When determining public interests in a request for 1) a private use structure, 2) activity over/in/under State wetlands, or 3) severance of materials from State wetlands, the State must consider the ultimate project and beneficial purposes to be served. Public interests are considered in the review process and are defined as demonstrable environmental, social, and economic benefits which would accrue to the public-at-large as a result of a proposed action or activity

Agency comments, resource information, and environmental concerns are now taken into account and addressed. As directed by the Wetlands and Riparian Rights Act, related regulations, and the public policy of the State, the review takes into account ecological, economic, development, recreational, and aesthetic values in the process of minimization of impacts to wetlands to prevent despoliation and destruction.

Step Five: Final Permitting Actions

The Department concludes the review of the proposed project by making a determination and/or recommendation to approve, deny, or modify the project. If it meets the requirements of a General License, MDE issues the authorization with the joint permit (MDSPGP) for the Corps, and the process concludes. If the project requires a Tidal Wetlands License, additional steps are required.

Steps Six, Seven, and Eight for Projects Requiring a Tidal Wetlands License

For projects requiring a Tidal Wetlands License, MDE recommends to the Maryland Board of Public Works an action for the Board to consider. The Board of Public Works Wetlands Administrator reviews the application and presents it to the Board of Public Works for approval. In some cases, a personal appearance may be required by the applicant or requested by grieved parties to the MDE recommendation.

Additional Regulatory Requirements

Maryland Coastal Zone Management Program and Water Quality Certification are part of the review process and do not undergo a different review path. The Critical Area Commission requirements are also considered, particularly in cases where the 100 foot Critical Area buffer is being impacted to construct a shoreline project. For example, pruning, limbing, and removal of trees and understory vegetation may be required for the establishment of wetland vegetation, which are above the high water mark and the jurisdiction of local government Critical Areas programs.

PERMITTING FROM A LOCAL JURISDICTION PERSPECTIVE – KENT COUNTY

Under the Erosion and Sediment Control Law, local governments have the authority to manage shoreline erosion protection. The Chesapeake Critical Area Program (Title 27.01.04.02) directs local jurisdictions to (a) encourage the protection of rapidly eroding portions of the shoreline in the Critical Area by public and private landowners and (b) where such measures can effectively and practically reduce or prevent shore erosion, encourage the use of nonstructural shore protection measures in order to conserve

and protect plant, fish, and wildlife habitat. This direction has been interpreted differently by various local jurisdictions in Maryland, with some jurisdictions more proactive than others. Some counties rely mainly on the outcome of the joint state and federal permit process, while others have established their own specific living shoreline policies.

Kent County, Maryland, is one local jurisdiction taking an active role in promoting the use of living shorelines for shoreline stabilization. County policy requires property owners to consider a living shoreline option first when proposing to protect shorelines from erosion and to justify use of hardened shoreline armor. This policy has been codified in the County Land Use Ordinance. Two factors have facilitated Kent County's policy on living shoreline. First, Kent County is a Code Home Rule county, meaning that the local government has the option to be more restrictive than the state. Second, Kent County does not have a Critical Area overlay, allowing the same policies to apply in the Critical Area Boundary (the area 1000 ft landward of the shoreline) as they do in non-critical areas. The County has the lead in determining land use activities in both areas. As a result, Kent County has integrated the following language directly into its Land Use Ordinance:

> "The purpose of this section is to encourage the protection of rapidly eroding portions of the shoreline in the County by public and private landowners. When such measures can effectively and practically reduce or prevent shoreline erosion, the use of nonstructural shore protection measures shall be encouraged to conserve and protect plant, fish, and wildlife habitat. The following criteria shall be followed when selecting shore erosion protection practices:
>
> 1) Nonstructural practices shall be used whenever possible;
> 2) Structural measures shall be used only in areas where nonstructural practices are impractical or ineffective;
> 3) Where structural measures are required, the measure that best provides for the conservation of fish and plant habitat and which is practical and effective shall be used;
> 4) If significant alteration of the characteristics of a shoreline occurs, the measure that best fits the change may be used for sites in that area."

Not only has Kent County pursued an ordinance change to support living shoreline use, the County Department of Planning and Zoning has provided its residents with tools to implement nonstructural approaches. The County has sponsored educational sessions with the commissioners, planning commission, area realtors, watershed associations, and other community groups. The County benefited from initial interest by area contractors to provide the service. In addition, the County was awarded a grant by the Maryland Coastal Program and administered by Eastern Shore Resource, Conservation, and Development Council (RC&D) to promote awareness of living shoreline practices. The RC&D has provided technical assistance and site inspections to county staff to assist them in implementing their policies.

PERMITTING ISSUES TO BE ADDRESSED

Since 1993, permits have been granted for 230 miles of hardened shoreline armor in the Chesapeake Bay. Several impediments have limited the use of living shoreline techniques in place of structural armor. These obstacles are related to questions about design, concerns about effectiveness, aesthetics, lack of property owner awareness and behavior change, and availability of incentives. Incentives to overcoming these impediments are discussed elsewhere in this volume. However, some issues are regulatory in nature and relate to permitting. Addressing these issues may aid in the increased use of living shorelines, rather than hard shoreline armor, under appropriate site conditions.

Reconciling Federal/State and Local Permit Application Processes

As discussed above, some local jurisdictions have additional requirements or policies beyond the state and federal review processes. As a result, applicants who wait to obtain a local permit after the joint fed-

eral/state permit is granted could face a substantial revision of their project designs based on local review. Communication related to sequencing of state and county review, similar to the pier permit notification system, would ensure consistency in the application of state and local Critical Area policies. State officials can also promote living shorelines as a preferred method of shoreline stabilization, where appropriate, for applications in jurisdictions with specific living shoreline policies. Therefore, local jurisdictions more involved in the development of shoreline policies and permit review process could facilitate greater implementation of these projects in the future.

Kent County, specifically, is seeking to establish a process related to the sequencing of permits, in which the county review would be concurrent with or prior to state review of a shoreline construction permit. A potential mechanism to implement a sequential process change could be offered by a Memorandum of Understanding (MOU). In addition to an MOU, Kent County is proposing to hold an annual meeting to facilitate and maintain communication between state and federal review staff and local plan reviewers. Increasing open dialogue could improve efficiency and clarify expectations for not only local reviewers, but also for property owners and their contractors.

Duration of Permit Review Process

On an annual basis, MDE receives over 2000 applications for tidal wetland permits to implement both traditional and living shoreline projects. Permit review takes between three and six months but can take longer for projects that (a) are more complex or use non-traditional construction or design elements that require a site visit (a category under which many living shoreline designs fall), (b) require a hearing (20 applications per year), or (c) are sent to the Board of Public Works (about 10% of those received per year). MDE inspectors do not visit all sites, mostly due to the lack of staff resources. Number of staff has been reduced by as much as 60% in recent years. Staffing enhancements would most likely reduce permit review time, increase frequency of site inspections, and potentially allow greater implementation of living shoreline project types.

In many coastal states, permit fees are used to at least partly fund the review and permitting process. In Maryland, however, though a permit fee is required for large-scale projects (greater than 500 linear feet in length or greater than 35 feet offshore), projects below these limits do not require permit fees.

Several bills have been proposed in the Maryland State Legislature requiring a modest fee for general permits to support MDE Water Management Administration activities, thereby reducing the length of permit review time. Such bills have been hotly debated, but no resolution on the issue of general permit fees has been reached. Currently, the fees from the Tidal Wetlands License permits (for the large-scale projects) are deposited in the Tidal Wetlands Compensation Fund, which funds wetlands or living shorelines projects on private lands in the counties from which the fees were collected. These fees cannot be used for personnel within the permitting and inspection offices.

While other coastal states can be used as a model in establishing reasonable license fees, it should be noted that not all fee structures in other states are conducive to living shorelines. For example, North Carolina requires a $100 fee for general permits involving structures abutting the shoreline (such as hard armor revetments) and $400 for projects involving offshore structures (such as living shoreline sills). In this situation, a regulatory and financial disincentive is placed on projects with wetland creation objectives such as offshore sills and breakwaters.

Communication Among Jurisdictions

Watershed issues, including nonstructural shoreline protection, are currently shared and discussed at various meetings and projects such as quarterly Critical Area Commission Maryland Association of Counties, quarterly regional planners' meetings, the Coastal & Watershed Resources Advisory Committee, Tributary Strategy Teams, and collaborative watershed projects such as the Watershed Restoration Action Strategies. Forums such as these will continue to serve as excellent opportunities for local jurisdictions to share information about the effectiveness of living shorelines, design and implementation issues, regulatory and permit processes, and property owners' concerns. Additional coastal counties have indicated an interest in updating or strengthening nonstructural erosion control policies and learning by example

from others that have initiated the process. As more information about design and effectiveness of living shoreline techniques continues to be produced, all sectors, including contractors, property owners, and regulators, will benefit from continued education. Over time, success rates and proven practices can be effective regulatory tools as well.

SUMMARY

Recommendations for Property-Owners

1) Property owners should pursue permits from local agencies at the same time they apply for the joint federal-state permit.

Recommendations for Regulators/Managers

2) State and local permitting jurisdictions should communicate frequently about their permitting processes and policies. An annual meeting of state and local regulators should be held.
3) Local jurisdictions should share information on living shoreline codes and policies more frequently, at forums such as Critical Area Commission Maryland Association of Counties, quarterly regional planners' meetings, the Coastal & Watershed Resources Advisory Committee, Tributary Strategy Teams.
4) State and local permit review should occur concurrently, with state and local reviewers communicating information about permit review.
5) State permitters should be kept informed about changes to local policies and codes, such that state officials are aware of regions requiring use of living shorelines where appropriate.

Recommendations for Policy Change

6) The number of MDE permit inspectors should be increased to reduce permit review time and allow for greater inspector input.
7) Lawmakers should consider positive and negative ramifications of instituting a general permit fee that does not inhibit or create a disincentive for living shorelines projects.

Note: See page *xiii* for changes in Maryland Living Shoreline Policy, 2008.

Regulatory Program Overview for Virginia's Submerged Lands and Tidal Wetlands and Options for Promoting Living Shorelines

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ABSTRACT

In Virginia, a number of federal, state, and local regulations, ordinances and policies may affect shoreline management projects, including living shoreline designs. Management of submerged lands and tidal wetlands, however, provides the core of this regulatory framework. The purpose of this paper is to: 1) describe the state and local regulatory process for submerged lands and tidal wetlands as it relates to shoreline erosion control projects in Virginia, 2) discuss initiatives currently underway or planned by the Virginia Coastal Zone Management Program to improve shoreline management and promote the use of living shorelines, and 3) review the options for promoting living shorelines identified during the Living Shoreline Summit panel discussion.

INTRODUCTION

The Commonwealth of Virginia is endowed with over 5,200 miles of tidal shoreline encompassing 2,300 square miles of water surface covering 1,472,000 acres of state-owned bottomlands. These submerged lands, greater in area than the state of Delaware, are a public resource and a valuable habitat for shellfish, crabs, and finfish. In addition, along the fringes of the many coves, creeks, rivers, and bays of the Chesapeake estuary and along the Atlantic Ocean coast grow some 225,000 acres of vegetated tidal wetlands. These vegetated areas, particularly the salt marshes, constitute a vital spawning and nursery area and are an important element of the marine food webs for many economically valuable marine resources of the Commonwealth.

Much of the charge for ensuring that these resources are responsibly used rests with the Habitat Management Division of the Virginia Marine Resources Commission, operating under the mandates of Virginia's tidal wetlands and subaqueous laws. This responsibility is managed through the review of permit applications submitted for encroachments over state-owned submerged lands and for the use or development of tidal wetlands.

In addition to its regulatory responsibilities, the Division also functions as the central clearinghouse for receipt and distribution of the Joint Permit Application (JPA) booklet that is used throughout the Commonwealth. Upon receipt, an application processing number is assigned which is then used by all of the local/state/federal regulatory and advisory agencies. Copies of the application are distributed to the Local Wetland Boards, the Department of Environmental Quality (DEQ), various State agencies, and the Virginia Institute of Marine Science (VIMS) for comment, as well as the U.S. Army Corps of Engineers for concurrent processing. Upon receipt, a JPA is processed independently by each regulatory agency (Fig. 1).

The Code of Virginia (Chapter 12 of Title 28.2) vests ownership of "all the beds of the bays, rivers, creeks, and shores of the sea in the Commonwealth to be used as a common by all the people of Virginia." The Marine Resources Commission Habitat Management Division reviews the permit appli-

cations, solicits public comment, applies public interest factors, and then prepares a recommendation to the Commissioner or Commission for a decision.

Habitat Management Division environmental engineers weigh each individual application received to determine that they are in the public interest. This is accomplished to ensure that projects are necessary, there are no reasonable alternatives requiring less environmental disruption, and that adverse effects do not unreasonably interfere with other private and public rights to the use of waterways and bottomlands. Particular emphasis in this regard has been applied to the reduction of unnecessary filling of State bottom, including the proper application of living shoreline treatment options, the reduction of obstructions or hazards to navigation, and the prevention of structures encroaching into adjoining riparian areas. While the Division and the Commission support the concept of living shoreline techniques where appropriate, projects that result in the filling of subaqueous lands must be evaluated on a case-by-case basis to consider any habitat trade-offs involved in each particular decision. Use of these project evaluation criteria at an early stage often suggests project modifications, reduces conflicts between property owners, and, of course, protects intertidal habitats and navigation. Also, each of the Division Engineers is assigned a specific geographic territory. They process all applications received from their assigned areas. This arrangement leads to enhanced area familiarization and increased efficiency. They are required to work closely with the various local governing bodies involved, and invariably develop a network of contacts and generate a level of expertise that itself results in a more efficient application review process. They serve as a single point of contact for the applicant and shepherd the application throughout the entire public interest review process.

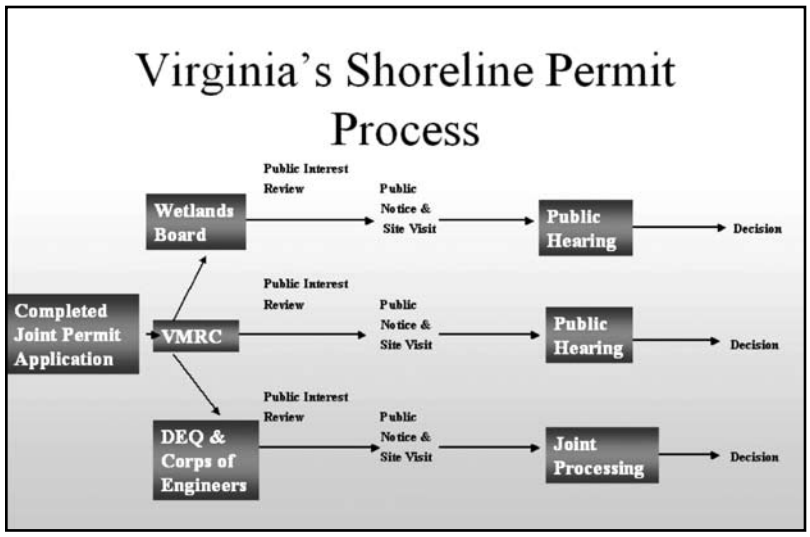

Figure 1. *Virginia's shoreline permitting process.*

Not all conflicts, however, can be settled by Division engineers through consultation with affected parties. Protested projects or those for which commission staff cannot recommend approval must be considered by the nine-member, Governor appointed Commission. As a citizen's body and quasi-judicial board meeting monthly, the Commission does a valuable service by providing not only a forum for public discussion and the airing of disputes, but also as a regulatory body, evaluating the issues and making decisions.

Unlike submerged lands that are the property of the Commonwealth, the tidal wetlands statutes the Division administers are not based on ownership. Rather, they are based on the ability of the State through its police powers to regulate private uses of wetlands because of the anticipated impacts those uses might have on the public's health, safety, and welfare. The enabling legislation provides a model zoning ordinance that is available for local adoption and implementation. Where the locality has chosen not to adopt the ordinance, the State (i.e., the Commission through the Habitat Management Division) assumes that management role. See Figure 2 for a depiction of jurisdictional boundaries for state-owned submerged lands and tidal wetlands.

As required by the tidal wetlands ordinance, every wetlands project is the subject of a public hearing by the local board or the Commission. This process requires the notification of adjacent property owners and various agencies. In addition, wetlands boards as well as the Commission rely heavily on the project assessments prepared by VIMS for each project.

In conformance with §28.2-1310 of the Code of Virginia, the Commissioner reviews every decision rendered by the individual wetland board to ensure uniformity. He will recommend that the full Commission review any local decision where he believes the local board failed to fulfill its responsibilities under the wetlands zoning ordinance. The Commission would then review that decision at a regularly scheduled meeting.

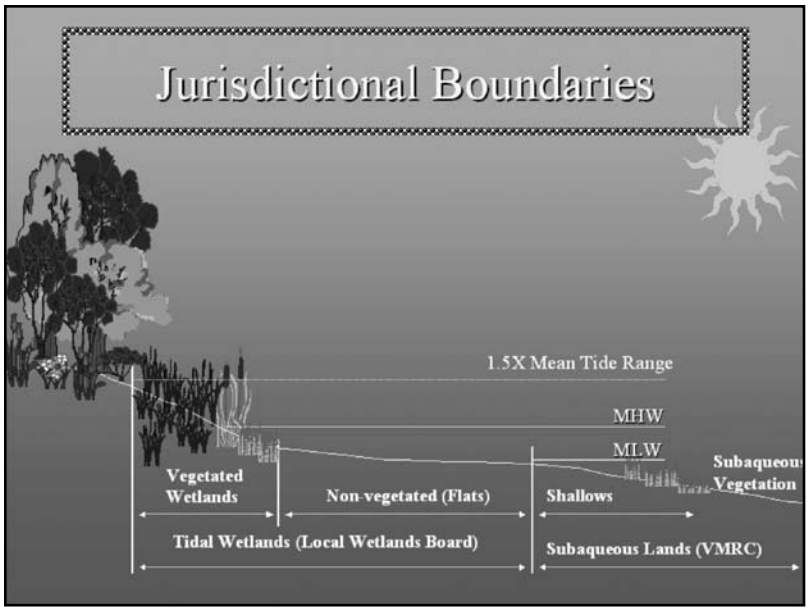

Figure 2. *Jurisdictional boundaries for Virginia-owned submerged lands and tidal wetlands.*

At present, 36 of the 46 Tidewater localities have adopted, and are locally administering under VMRC oversight, the model wetlands ordinances provided in State Code. Many of the localities that have not adopted the model ordinance are located in the western part of the coastal zone, have limited tidal wetlands and as a result see few applications for tidal wetlands permits. Where not locally adopted, the Commission serves as the wetlands board. The Commission also hears and decides all wetland appeals that are filed by either an aggrieved applicant or 25 or more freeholders of property within the locality.

When coupled with the Commission's fisheries management responsibilities, the submerged lands and tidal wetlands laws enable the Commission to regulate not just the fishery, but also the critical habitats upon which those very fisheries depend. This arrangement has served the Commonwealth well for over twenty-five years.

When considering shoreline protection projects involving both wetland and submerged lands, whether they be bulkheads, riprap, breakwaters, or fills for the establishment of a vegetative wetland fringe that one might define as a living shoreline, the existing ecological conditions at the site must be considered along with the impact of any activity on nearby or adjacent properties, fisheries resources, other uses of state-waters and submerged lands, water quality, wetlands, and submerged aquatic vegetation. As such, acceptable projects that may be classified as a living shoreline should improve ecological conditions without any adverse affect when considering these factors.

VIRGINIA'S COASTAL ZONE MANAGEMENT SHORELINE STRATEGY

The Virginia Coastal Zone Management (CZM) Program completed an assessment of coastal resources in 2006 as well as a planning initiative to direct efforts for the next five years under Section 309 of the federal Coastal Zone Management Act. One of the strategies targets shoreline management and focuses on promoting living shorelines. This strategy is slated to provide $750,000 over the five year period for various initiatives and will produce the following outcomes:

- A "Living Shoreline Summit," (held December, 2006) with peer reviewed proceedings, to advance the use of this management technique;
- Revised "Wetlands Guidelines" to be used by the Virginia Marine Resources Commission, the Virginia Institute of Marine Science, local wetlands boards, and others to guide decisions about shoreline and tidal wetlands management;
- Improved data on shoreline conditions to support more informed shoreline management decisions;
- Research to document the habitat value of living shorelines and to improve their design;
- A guidance document for local governments to use in shoreline management planning;
- Outreach materials for land use decision-makers, landowners, and contractors on living shoreline advantages and design principles;

- A training program for contractors and local government staff on living shoreline practices;
- A report on improving management of Virginia's dune and beach resources, including proposed revisions to the Coastal Primary Sand Dunes and Beaches Act;
- Anticipated changes to the Coastal Primary Sand Dunes and Beaches Act by the Virginia General Assembly; and
- Revisions to the Coastal Primary Sand Dunes and Beaches Guidelines.

EXPLORING REGULATORY OPTIONS FOR PROMOTING LIVING SHORELINES

A panel discussion at the Living Shoreline Summit (December 6 - 7, 2006) focused on ways to improve the current regulatory process in order to promote the use of living shorelines where appropriate. There was general agreement among the panel members and the audience that the current system, while it does not discourage the use of living shorelines, also does not actively encourage or provide incentives for living shorelines. Participants felt that structural approaches to shoreline management were the accepted norm and that landowners were comfortable with this approach, in part because structural solutions were more familiar to them, to their neighbors, and to those involved in the permitting process. Participants also agreed that new requirements for mitigation of any tidal wetland impact required by the VMRC Wetlands Mitigation-Compensation Policy and Supplemental Guidelines (Regulation 4 VAC 20-390-10) are likely to increase landowner interest in living shorelines as a way to avoid mitigation requirements. Prior to this regulation, impacts to tidal wetlands under 1000 square feet, such as those commonly associated with construction of bulkheads and revetments, did not require mitigation. Lastly, there was agreement on the importance of influencing waterfront property owners' decisions about shoreline management techniques prior to their submitting a permit application. The group felt that at the point of application, submittal landowners had committed substantial resources toward selecting a specific design and that it was difficult to alter that design.

A short summary of suggestions offered by both panel members and the audience is included below under three general topics. Note that some of the suggestions are already being addressed through the Virginia CZM Program Shoreline Strategy described above. Others will be addressed if deemed to be necessary or as resources become available. Actions taken to address any of these suggestions will be taken by the network of agencies and local governments that comprise the Virginia Coastal Zone Management Program.

Assist Waterfront Property Owners

- Develop outreach materials and an outreach program for property owners. Hold workshops, develop online decision-making tools, and construct local demonstration sites to help property owners with their initial decisions about shoreline management.
- Provide design assistance to homeowners. One option is to expand the reach and scope of the Shoreline Erosion Advisory Service (SEAS) at the Department of Conservation and Recreation.
- Provide opportunities for property owners to consult with representatives from advisory and regulatory agencies prior to submitting permit applications.
- Develop a living shoreline certification process for shoreline contractors so property owners can be assured that the contractor is proficient in this technique. Certification could be obtained by a contractor, agent, or others such as local government officials, by completing a course based on a planned living shoreline design manual. The course and manual are scheduled for development through the Virginia CZM Shoreline Strategy.
- Provide financial incentives to property owners, including grants and low interest loans for construction, tax breaks, and reduced permit fees. Financial disincentives, such as higher permit fees, could also be used in cases were a living shoreline approach was deemed feasible, but not chosen.

Provide Regulatory Guidance on Living Shorelines

- Modify the model ordinance used by localities to manage shoreline development through the Tidal Wetlands Act to encourage the use of living shoreline techniques where appropriate.
- Modify the Tidal Wetlands Guidelines to reflect a preference for living shorelines where appropriate.
- Revise the Joint Permit Application (JPA) to state the preference for living shoreline approaches where appropriate. Provide a sequence of priorities in the JPA and ask project proponents to justify their project. If structural approaches are desired, ask the property owner to demonstrate why a living shoreline approach would not work on their shoreline.
- Review shoreline erosion control projects holistically by evaluating the continuum of coastal resources that may be affected. This would include not only resources along the shoreline, such as wetlands, beaches, and dunes, but also in the riparian and littoral zones. It was noted that in some cases, structures had been moved landward from their original position in order to avoid the jurisdiction of the Tidal Wetlands Act.
- Improve the shoreline management provisions of the Chesapeake Bay Preservation Act's regulations and improve the Water Quality Impact Assessment (WQIA) for shoreline projects.
- Provide additional training for local wetland board members that includes guidance on how the protection of various coastal resources are to be prioritized.

Simplify the Regulatory Process

- Develop a general permit for living shorelines while retaining the oversight authority necessary to protect coastal resources. This should result in reduced review time and lower permitting fees because public hearing advertising fees would be eliminated. It would also require legislative authority from the Virginia General Assembly and living shorelines would have to specifically be defined in the Virginia Code.
- As an alternative to a general permit, provide some other form of expedited permit review for living shoreline projects. Streamline the review process for nonstructural shoreline projects, including administrative approval and a process for exceptions.